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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,341	03/26/2004	Atsuhisa Nakashima	119262	8238
25944 7590 01/02/2008 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			EXAMINER MRUK, GEOFFREY S	
			ART UNIT 2853	PAPER NUMBER
			MAIL DATE 01/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/809,341

Applicant(s)

NAKASHIMA, ATSUHISA

Examiner

Geoffrey Mruk

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US 6,203,136 B1) in view of Kusumi et al. (US 6,068,364).

With respect to claim 1, Takahashi discloses a print head cap (Column 1, lines 10-14) comprising:

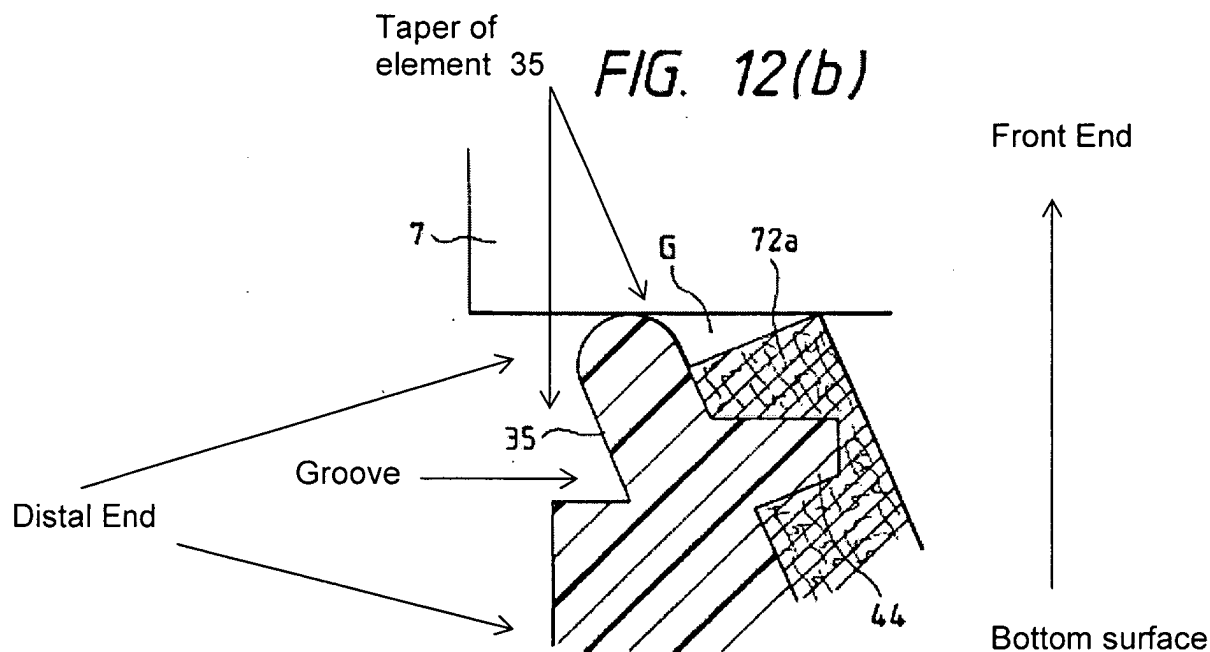
- a bottom surface (Fig. 12a, element 34); and
- a ring-like lip (Fig. 7a, element 35) surrounding the bottom surface like a ring, protruding toward a nozzle surface (Fig. 12a, element 7) of a print head an ink jet printer and being elastically deformable, the ring-like lip to be pressed onto the nozzle surface to cover the nozzle surface therewith (Column 6, lines 44-50);
- wherein the ring-like lip has corners (Fig. 7a, element 35a) that change a direction of surrounding the bottom surface; and includes a distal end (See Fig. 12b below) and a groove (See Fig. 12b below) that urges the distal end to be deformed in an outer side of the ring-like lip (Fig. 12b, element 35), the distal end falling downward to an inside of the groove when a print head cap is pressed onto the nozzle surface (Column 6, lines 44-54, i.e. cap expands); and

- the corners are more elastically deformable than the other portion of the ring-like lip (Column 6, lines 9-10), and the corners (Fig. 7a, element 35) are made thinner than the other portion (Column 6, lines 11-19; Claim 12).

With respect to claim 3, Takahashi discloses the other portion includes a plurality of side lips (Fig. 7a, element 35b); at least one of the corners (Fig. 7a element 35a) includes a corner lip; and the corner lip connects the side lips with each other.

With respect to claim 4, Takahashi discloses each of the side lips (Fig. 7a, element 35b) has a front end and is formed into a tapered sectional shape which is smaller in width as a location goes from the bottom surface toward the front end (See Fig. 12b below); and the corner lip has substantially the same height (Column 6, lines 45-48, i.e. sealing the recording head) as the side lips and is smaller than the side lips in thickness (Column 6, lines 11-19; Claim 12).

With respect to claim 5, Takahashi discloses the ring-like lip is formed into a rectangular shape (Fig. 7a, i.e. plan view of element 35); and the side lips (Fig. 7a, element 35b) include a pair of linear side lips on long sides and a pair linear side lips on short sides.



With respect to claim 10, Takahashi discloses a print head cap (Column 1, lines 10-14) comprising:

- a bottom surface (Fig. 12a, element 34); and
- a ring-like lip (Fig. 7a, element 35) surrounding the bottom surface like a ring, protruding toward a nozzle surface (Fig. 12a, element 7) of a print head of an ink jet printer and being elastically deformable, the ring-like lip to be pressed onto the nozzle surface to cover the nozzle surface therewith (Column 6, lines 44-50);
- wherein the ring-like lip has corners (Fig. 7a, element 35a) that change a direction of surrounding the bottom surface (Fig. 12 above) and includes a distal end (Fig. 12 above) and a groove (Fig. 12 above) that urges the distal end to be deformed in an outer side of the ring-like lip (Fig. 12b, element 35), and

- the corners are more elastically deformable than the other portion of the ring-like lip (Column 6, lines 9-10), and the corners (Fig. 7a, element 35) are made thinner than the other portion (Column 6, lines 11-19; Claim 12).

However, Takahashi fails to disclose the groove extends vertically and perpendicular to the bottom surface.

Kusumi discloses a cap for a service station for ink-jet printheads where the groove (Fig. 4, element 48) extends vertically and perpendicular to the bottom surface.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the cap disclosed by Kusumi as the capping device disclosed by Takahashi. The motivation for doing so would have been "An object of the present invention is to provide an effective seal between the cavity defined by a cap and the ambient environment without any absorbent pad" (Column 1, lines 65-67).

Response to Arguments

Applicant's arguments filed 17 October 2007 have been fully considered but they are not persuasive. The applicant argues "Further, there is no suggestion that Takahashi and Kusumi could even be combined with any reasonable expectation of success. Takahashi and Kusumi decidedly disclose completely different structures that are provided for sealing nozzle openings. Modifying any structural feature of Takahashi as suggested by the Office Action would very likely destroy the sealing ability of Takahashi."

However, the examiner respectfully disagrees. All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. (*KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007)).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey Mruk whose telephone number is (571) 272-2810. The examiner can normally be reached on Monday-Friday 7:30am - 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GSM
12/27/2007



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER